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Portal Septic Thrombosis: A Case Report

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BACKGROUND

Pilephlebitis or portal septic thrombosis is a rare complication secondary to inflammatory and/or septic processes of abdominal structures whose venous drainage converges to the portal venous system [1]. This pathology consists of the formation of thrombi in small caliber vessels within the affected abdominal region, which can progress to directly affect the portal vein and intrahepatic vessels, as well as septic embolisms causing serious complications for the patient's health, such as liver abscesses, liver failure, portal hypertension, etc. abdominal sepsis and even death [2]. The main pathologies in which this entity can occur are acute appendicitis, diverticulitis, acute cholecystitis, although others such as pelvic inflammatory disease have also been mentioned [3]. The most frequently isolated etiologic agents are Bacteroides fragilis and Escherichia coli [4].

The presentation of the clinical picture may vary, depending on the location of the thrombosis and may present with abdominal pain, fever, jaundice, hepatomegaly, liver abscesses which are usually predominant in the right lobe, mainly in the 6th and 8th segment of the body [4, 5].

The diagnosis is made by performing an imaging study such as computed tomography, as it also allows us to guide the origin of the underlying pathology. And a Doppler ultrasound may also be performed to check portal and mesenteric flow [6]. Treatment consists of broad-spectrum antibiotic therapy and surgery to eliminate the primary infectious focus [4, 7].

CASE REPORT

The patient is a 46-year-old woman with a history of diabetes mellitus for 5 years in irregular treatment with metformin 800mg every 24 hours, and denies a history of surgery, allergy and transfusion. She went to the Balbuena General Hospital with abdominal pain 10/10 on the VAS scale, which began in the epigastrium, radiated to the mesogastrium and later became generalized, accompanied by feverish peaks, presented with a mild jaundiced tinge. The patient reported 8 days of the onset of the clinical picture, going to multiple medical doctors who prescribed unspecified medications and of which the patient did not report improvement, which is why she went to this hospital unit.

On physical examination we found a conscious, oriented patient, with the presence of diaphoresis, pale skin and integuments, we found a heart rate of 118 beats per minute, a distended abdomen, without scars from previous surgeries, on auscultation we did not find peristalsis, on palpation we found an abdomen, with hyperbaralgesia, involuntary rigidity of the muscles of the anterolateral wall of the abdomen, as well as hepatomegaly.

Paraclinical studies report significant leukocytosis with neutrophilia, prolonged coagulation times, altered performance tests, hyperbilirubinemia with obstructive pattern. Electrolyte imbalance, as well as acute kidney injury. An ultrasound was performed, which reported: a liver with hypoechoic echotexture with increased echogenicity of the walls of the intrahepatic vessels, forming bright echoes in a diffuse and generalized way, congestive and enlarged hepatic lobes, and free fluid was also identified in the abdominal cavity (Figure 1).

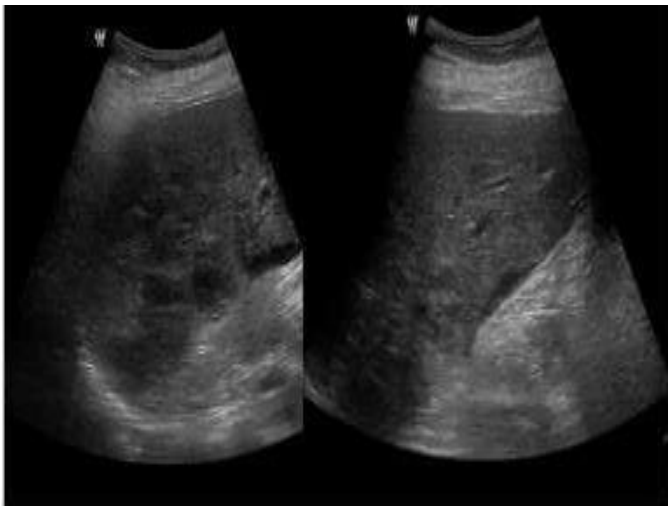

Figure 1

Based on the data obtained during the patient's assessment, it was decided to perform an exploratory laparotomy and found the following findings: 6x1 cm cecal appendix necrotic in the middle third and base, perforation at the appendicular base with fecal matter leakage (Figure 2), hepatomegaly, congestive lobes, liver abscess in Couinaud's eighth segment. 300 cc of free fluid in the abdominal cavity with purulent characteristics (Figure 3).

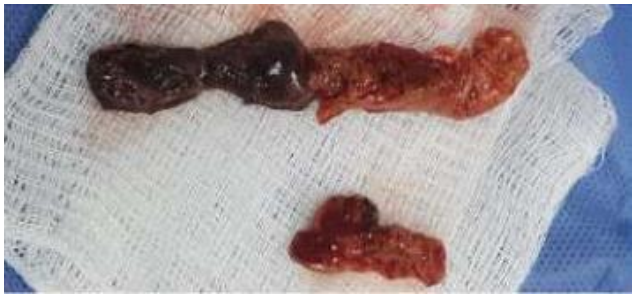

Figure 2

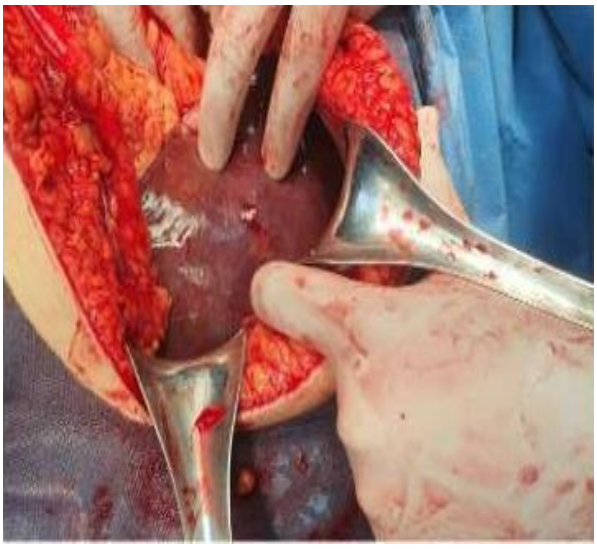

Figure 3

In terms of management, a complete exploratory laparotomy was performed by quadrants, an open appendectomy was performed, with simple ligation of the stump and an intussusception of the stump was performed with seromuscular stitches, a washing and drying of the cavity was performed, and the drainage of the liver abscess in the eighth segment was assessed, however, due to its characteristics it was not possible to perform drainage at that time. Therefore, it was decided to give antibiotic medical management in the postoperative period. A Penrose-type drain is placed into the pelvic hollow. And the surgical procedure is terminated

The patient presented with septic shock, so at the end of the surgery she was admitted to the intensive care unit for 15 days managed with broad-spectrum antibiotics, with a favorable evolution, so on the 17th day of hospital stay she was discharged from the hospital, she was sent home with metronidazole for 2 more weeks.

The patient was followed up by the outpatient clinic, going on the 30th day of the postoperative period where a patient with adequate clinical evolution was found, referring to slight pain at the site of the surgical wound, which was with clean and faced edges, peristalsis present normoactive on palpation, decrease in the hepatomegaly presented on admission, Subsequently, an abdominal tomography scan was requested (Figure 4) in which the image of the liver abscess improved was observed. The patient continues to be followed for 3 months without apparent complications.

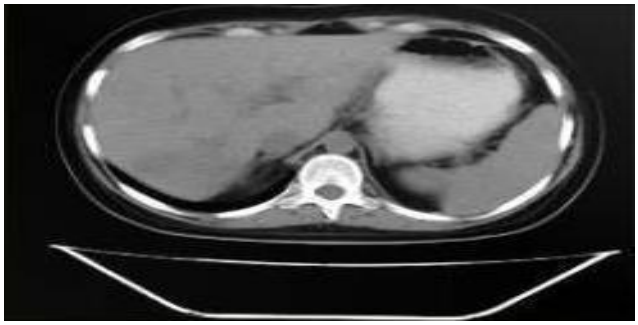

Figure 4

CONCLUSION

Portal septic thrombosis represents a diagnostic challenge due to its low frequency, requiring a high degree of clinical suspicion, in these cases, it is crucial to direct the evaluation towards the presence of jaundice, hepatomegaly and an accurate interpretation of imaging studies. however, the main focus should be on a thorough evaluation of the patient in the face of acute abdominal symptoms. Early diagnosis is essential to prevent complications. Early identification allows for the timely implementation of comprehensive treatment, which may include surgery to eliminate the primary focus, a broad-spectrum antibiotic regimen, and consideration of anticoagulation depending on the severity of the case.

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